Television Scoping Meeting Notes
FOR INFORMATION ONLY - **NON- DECISIONAL**

April 21, 2008
Washington DC

**Attendees:**
Navid Ahdieh, Toshiba America, Inc.
Aaron Aragon, UNICOR
Janice Aragon, UNICOR
Patricia Dillon, Dillon Environmental Associates
Sharon Dorsey, Marriott International
Jeff Eagan, US Dept. of Energy
Holly Evans, Strategic Counsel, LLC (for AMD)
Jon Fairhurst, Sharp Labs of America
Jack Geibig, University of Tennessee - Knoxville
Katharine Kaplan, US EPA
Susan Landry, Albemarle Corporation
Judy Levin, Center for Environmental Health
Hayley Mason, US EPA
Linda McFarland, Classic Computer Recovery Inc
Sue Nogas, Veterans Administration
Larry Novicky, UNICOR
Jeff Omelchuck, Green Electronics Council
Sahar Osman-Sypher, IPC
Colleen Pickford, Information Technology Industry Council
Kelly Polich, D'Lane Wisner & Associates, LLC (representing Electronics & Appliances Market & Issues Team of the Plastics Division of the American Chemistry Council)
Roy Qualliotine, UNICOR
Wayne Rifer, Rifer Environmental
Lauren Roman, MaSeR Corporation
Itaru Sato, Sharp Electronics Corporation
Mark Schaffer, Supply Chain Consulting US, LLC
Steve Scherrer, Chemtura Corporation
Mark Sharp, Panasonic Corporation of North America
Cindy Silva, Sony Electronics, Inc.
Ted Smith, Computer Take Back Campaign
Maria Leet Socolof, Abt Associates, Inc.
Jack Staudt, Department of Veteran Affairs
Beverly Thorpe, Clean Production Action
Todd Washburn, SABIC Innovative Plastics
Kristi Weidemann, Consumers Union
Cat Wilt, University of Tennessee

**1. Welcome, Introductions, & Agenda Review**
**Please note:** this meeting was meant to gather input and ideas from all stakeholders on issues critical to the development of an environmental perfomance standard for televisions. **There was no effort to reach decisions on any particular issue, nor to find**

**consensus among stakeholders.** These notes are presented as they were recorded, and reflect the collective thinking of all the participants. As a result, the notes contain conflicting statements and opinions. Any expressed consensus reflects decisions that individual groups may have reached on their own.

EPA will not be developing any future standards. Input from this meeting will be transmitted to the IEEE Television study group once it is established. That group will make all decisions about the development and scope of any future standard. The standard will be developed through an ANSI-approved, open, balanced, and consensus-based process.

**All documents distributed at the meeting and referenced below can be found at:**
**www.epa.gov/region09/waste/p2/elect-scope-meeting.html**

**1. Welcome and Introductions, Agenda Review and Goals of the Meeting**

- Facilitator Marie Rainwater presented the ground rules for the meeting (see attached document *"Code of Conduct.doc"*
- Goals of the meeting:
    - Develop an understanding of the standard development process, and a broad outline or framework for scope of the new standard
    - Establish path forward to respond to stakeholder input.
    - Identify key stakeholders who need to be involved in developing a standard.
    - Process goal: Form strong working relationship to carry forward into subsequent standard development meetings.
- Facilitator made clear that the meeting was designed to **gain input for upcoming standards development workgroup** - to identify stakeholder issues, not to resolve them. Therefore, there will be no attempt to reach consensus or to make any decisions at this point.

**2. Presentation by Wayne Rifer on Development of EPEAT and IEEE 1680**

See attached presentation: *TV-Scoping-WR-Presentation.pdf*

**3. Presentation by Holly Elwood, EPA on Next Steps and Standards Development**

See attached presentation *Elwood-Overview-standards-process.pdf*

**4. Discussion on principles for developing new standard**

A. Presentation on the principles underlying the development of IEEE 1680 – see attached document *EPEAT principles.doc.*

There were several questions raised about the principles:

- How will cost be factored into the development of a standard?
- Need to maintain flexibility in order to spur innovation
- Will this have an influence on design? Digital conversion is well underway, and essentially will be finished by 2012, so the standard may not influence that change

**5. Scope of products to be covered by the new standard**

**A. Presentation**

- Overview of Televisions and their technologies. See attached document *ITIC-EPEAT-TV-Scoping-Mtg-21Apr08.pdf.*
- A proposed scope was presented, based on the Energy Star Television Standard, which was proposed in the Standards Development Roadmap as the starting point for this standard.

**B. Discussion:** Is this scope a good starting point for this process? Are there any suggested changes, adjustments that should be made to the scope of products covered by this standard?

- Do we have market projections for the various technologies, especially after the completion of the digital conversion (2009 it begins, and in 2012 cable will no longer covert analog to digital)?
- What is the projected product life for this category? Will this affect the scope?
- Are converter boxes included in the Energy Star TV scope? Energy Star has a separate standard for converter boxes. Energy Star also has a separate standard for other set-top boxes (cable, satellite, etc.)
- Does this scope include digital signage – professional grade monitors?
    - Need to recognize that definitions are currently very fluid between what is a TV, a monitor, a display device, etc.)
    - Shouldn't these be addressed under the current 1680 standard for monitors?
- Major difference between monitor and TV is the existence of a tuner.
- There are also secondary monitors – for instance, visual alert systems in schools using video displays in classrooms.
- Definitions may not need to be as detailed as Energy Star. May be able to be more broad.

**6. Discussion on Environmental Performance Categories and Critical Criteria to Consider**

**A. Presentation on Environmental Performance Categories** used in current IEEE 1680 – see document *EPEAT Environmental Performance Categories.doc*

**B. Discussion**: Small groups were established to discuss two issues:

- Are there any suggested changes, adjustments that should be made to the Performance Categories?
- What critical issues need to be considered when setting performance criteria for these products? Are there particular criteria that should be included, excluded, or changed?

<u>Group 1:</u>

- May need to remove or change "Lifecycle Extension" - modular design and upgradability are not as relevant for TVs

- Should include End of Life management, but may not be able to mandate manufacturer provide. End of life management will need much discussion.
- Should "Toxics in Packaging" be included in "Environmentally Sensitive Materials?"
- Environmentally Sensitive Materials
    - Should provide recognition for companies that go beyond RoHS (e.g. lower lead contents, etc.)
    - Consider corporate emission control programs as optional point – e.g. flame retardant product stewardship initiative to reduce emissions by users/customers.
    - Should monitors and TVs be combined?

Group 2

- Design categories/labels are OK as is
- Is radiation a concern for these products?
- Consider Embodied CO2 or total greenhouse gas emissions for the product
- Possible additions to the Corporate Performance criteria:
    - Participate in other programs, such as Smartway (EPA transportation program), use of renewable energy in production, Performance Track
    - Green building – use of LEED buildings
    - Promoting green transportation in other countries
- Environmentally Sensitive Materials
    - Include criteria for brominated flame retardant components, such as BPA
    - Should include RoHS
- Design for End of Life
    - Consider ease of recycling for specific components, such as mercury in backlights, liquid crystal materials.
    - Ask for any materials – can they be recycled?
- Longevity
    - Is there a way to upgrade TVs?
    - What about "scope creep" – how do we consider future or additional materials?
- End of Life Management
    - Provide take back for consumers, should be free and convenient
    - Audit chain of custody all the way to final disposition (include export?)
    - Be aware of need to recycle future platforms/technologies – should be built into design decision
- Packaging
    - Reduce or promote recycling of polystyrene foam

Group 3

- Concerns about Environmental Impact Categories
    - Upgradability- not clear how this applies – how to affect current design vs. future design
        - Look at the economics of repair – does it make sense?

    - Consider standard inputs
    - Consider some optional points vs. required – just because this category isn't relevant for many products, doesn't mean it can't be relevant for some
- Consider Indoor Air Quality as a category
- Consider points for "better than Energy Star"
- Consider Noise
- Reduction in paper manuals – manuals provided on line
- Consider Radiated emissions
- Consider Embodied Carbon, other lifecycle metrics or measures
- Consideration of toxics should be science-based, on a chemical by chemical basis (not classes of chemicals)
- Expand Corporate Performance criteria – use of solar power, recycling water, etc.

Group 4

- Consider going beyond RoHS – maybe include arsenic as well
- Supply chain considerations –
    - How do existing standards address this
    - Need a carbon reporting criteria
    - Consider how REACH may restrict a new set of Environmentally Sensitive Materials
- End of Life Management
    - Mandatory take back – good idea, but lots of issues
    - Review or upgrade the criteria for Environmentally Responsible Management. Go beyond the Plug-In guidelines.
    - Look at the emerging R2 practices
    - Consider an export ban
- Display vs. TV issue – need more discussion

**7. Path Forward**

There was a general discussion around the feasibility and interest in launching a new standard for televisions. The group identified a number of issues surrounding the decision to develop a standard.

- It's not clear that consumers want a green standard. Lack of consumer interest is why there are very few manufacturers participating in this meeting.
- Concerns about market interest. Manufacturers don't want to put time and effort into developing a standard if it provides no benefit in the market place.
- There is no way to predict how consumers will react – they have no way of judging environmental performance of TVs now, so can't judge consumer demand until a standard exists. "If you build it, they will come."
- A standard should recognize leaders, not necessarily be attainable by entire industry.

- Is the institutional market large enough to warrant developing a standard strictly for institutional purchasers (rather than the consumer market)? Some estimated the institutional market to be about 10%.of all TVs.
- Need to recognize that there are other large purchasers interested in green purchasing who are not at the table – Kaiser Permanente, Dept. of Defense, and others.
- Is there adequate financing to develop a standard? If EPA only contributes half the money, what if manufacturers don't contribute the remainder? One response is that there is no way to know whether funding is forthcoming unless stakeholders decide to launch a standard.
- This process would be simpler and cheaper if stakeholders change the IEEE 1680 standard for monitors to include TVs, since the technologies are nearly identical
- The problem with that is that the 1680 standard was not developed with input from TV stakeholders – need to make sure they are included if that is proposed or pursued.

This was followed by a set of choices presented by the facilitator: is there adequate stakeholder support for launching a standard development process immediately (establishing a formal workgroup under IEEE Standards Association), or does there need to be more discussion? If more discussion is needed, would a "study group" established under the IEEE Standards Association be an appropriate forum for convening that discussion?

- Opinions were split nearly evenly between launching the standards development process immediately versus taking more time to study the issues involved before making that commitment.
- There was concern that launching a formal workgroup would make it difficult for stakeholders to "back out" if there was not adequate consensus to finalize the standard.
- Others argued that there is adequate demand and interest represented here, and convening a study group would only delay the process without changing the outcome. The standard development workgroup can stop at any time if consensus cannot be reached.
- Stakeholders were concerned about a study group being "open-ended" – if a study group is convened, it should have a specific charge and deadline for making a recommendation.
- There is not enough representation by manufacturers at this meeting to get a good sense of the industry's commitment to developing a standard. The manufacturers represented here only account for 20-30% of the TV market.

Based on the feedback, the group came to general agreement that the next steps should be:

- establish a study group
- the main task for the study group should be to develop a robust Project Authorization Request (PAR) for a television standard, and to gain stakeholder

consensus on the PAR so that it can be submitted to the IEEE-SA to launch a standard workgroup
- the study group should not take more than six months to complete its work (that is, six months after the process manager starts convening the group)
- the process manager and all other stakeholders need to work to get more industry and other stakeholders to participate in the study group and beyond.
- investigate more fully the target markets for a standard – institutional vs. consumer – but do not let the work of the study group be stalled by lack of marketing data.

In addition, the stakeholders suggested the following issues need to be considered or addressed in developing the standard. Some of these may be addressed by the study group, the standard workgroup, or other stakeholders:

- Need to figure out how fees and product registration will work – this is more of an issue for the Green Electronics Council, which runs the EPEAT registry.
- Should identify incentives for manufacturers to go into the consumer market. What will make a standard successful?
- Need to research target markets for a prospective standard – what is the relative size of the institutional versus the consumer market?

**8. Stakeholders to Include in the Process:** participants were asked to provide input on stakeholders who should be included in the standard development process, either groups or individuals:

- Manufacturers
- Retailers
- Electronics recyclers
- Non-governmental organizations, and environmental advocacy organizations
- Academics
- Environmental experts, especially on green design, chemistry, materials
- Purchasers who buy TVs (e.g. government, health care, universities, hotels)

**10. Next Steps:**

- EPA will type up the notes and post all documents from this meeting.
- Follow up on outreach to stakeholders and setting up the study group will begin once the grant to the process manager is awarded by EPA.
- Stakeholders should start to confer with their organizations about participating in the study group and/or future workgroups.
- Participants should provide contacts within the targeted stakeholder groups. These can be sent to John Katz at EPA (katz.john@epa.gov), who will pass on that list to the process manager once they are up and running.